U.S. Environmental Protection Agency
TMDL LISTENING SESSION

Theme: Listing Impaired Waters

Hilton Oklahoma City Northwest
2945 Northwest Expressway
Oklahoma City, OK 73112

November 15-16, 2001

The fourth in a series of five TMDL Listening Sessions was held on November 15-16, 2001 at the Hilton Oklahoma City Northwest, in Oklahoma City, Oklahoma. A copy of the agenda can be found at www.epa.gov/owow/tmdl. Approximately 150 people attended the meeting. Comments noted on worksheets from small group discussions and those submitted by individuals may be found at Attachment A. (Please link/bookmark to Attachment A in this document)

Day One: Welcome, Introductions, Review Meeting Agenda and Ground Rules

Mr. Philip Crocker, EPA Region VI – Ecosystems Protection Branch, provided a welcome on behalf of the U.S. Environmental Protection Agency and introduced fellow listening panel members: Mr. Chuck Sutfin, Director, Assessment and Watershed Protection Division, EPA and Mr. Jon Craig, Director, Water Quality Division, Oklahoma Department of Environmental Quality and past President of the Association of State and Interstate Water Pollution Control Administrators. Mr. Crocker highlighted several points regarding the listing process: the need for (1) a good, scientifically sound monitoring program and (2) assessment procedures to accompany it. He also shared hopes that participants might have suggestions for improving consistency across and within states. Mr. Craig also welcomed participants to the meeting on behalf of the State of Oklahoma. He noted the efforts to improve water quality that are being undertaken in the State and stressed the importance of each participant's input at the Listening Session and encouraged attendees to share their thoughts, opinions and ideas.

The facilitator, Ms. Gail Bingham, RESOLVE, reviewed the meeting objectives, agenda and logistics.

Presentation: TMDLs – Improving the TMDL Program

Mr. Sutfin opened with a presentation on improving the TMDL Program, focused on program goals and current initiatives, the approach for revising the rule and key rulemaking issues, as well as Listening Session objectives. He also reviewed recent initiatives to improve the listing process, including the elements of a new guidance document. Following the presentation, Mr. Sutfin asked for any questions, concerns or ideas from Session participants.

A participant asked if data associated with why waters are not identified as impaired should also be provided in the consolidated 303(d) and 305(b) reports. Mr. Sutfin responded providing assessment information on all waters will help the public understand the 303(d) list in the context of the state's overall water quality. Another participant wanted to know the rationale for not listing threatened waters in the 2000 rule. Mr. Sutfin replied it is difficult to clearly delineate what the 303(d) list should or should not include without a good definition for "threatened water." The topic is again open for consideration during the upcoming rule making.

A participant shared his support for the emphasis on data collection and monitoring. He then raised concerns about the limited amount of monitoring data states are putting into the new STORET and asked Panel members for additional information about it. The new STORET is a data collection system, based on Oracle, and requires quality assurance information be stored with monitoring results. Although the system is not widely used currently (by 20 states), the EPA is encouraging others to use the system. A widely used national monitoring database would facilitate state and stakeholder information-sharing and would improve the decision-making process. One reason for some participants' concerns was whether some data indicating impairment might be excluded and, thus, those waters less likely to be listed. As a follow up, an attendee asked if the state-by-state decision about sufficient quality of data collection should happen through the assessment methodology or a national standard. Mr. Sutfin replied that states are expected to document and explain their assessment and listing methodology. EPA has the authority to approve or disapprove the list in cases where the methodology is unclear or the rationale for listing or delisting is unclear or unsupported.

One participant asserted that the integrated report guidance shows no category with waters that are impaired but no TMDL is feasible and asked how can that issue can be resolved. Panel members replied that the Clean Water Act requires that water quality standards adopted by the state be achieved where attainable; if they are not attainable then the standard can be changed. One solution for improving the process would be to include a use attainability analysis as part of the TMDL process. Currently those tasks are carried out under separate processes. An individual asked how EPA can improve public involvement during the 303(d) and 305(b) processes and asked for further information about the pros and cons of doing so. EPA expects states to provide the public an opportunity to review the entire integrated list and supporting data. States should provide EPA a response to the comments received when they submit their list for approval. The public benefits from seeing what is listed and why.

A participant asked if the environmental impacts, economic and social costs and other aspects of the 305(b) list would be included in the integrated list. Panel members replied that yes, that information is required by statute under section 305(b).

Another participant suggested not listing water bodies that may need more than 2-4 years to attain water quality standards. The time frames for attainment will be addressed in the final guidance, responded panel members. The rule itself doesn't establish a time frame but instead requires that the state predict compliance with standards in a reasonable time frame. However, this is not considered a

reason not to list waters that are impaired.

An individual commented on the problem with basins that cross-state boundaries, particularly when one part of the basin is listed and the other is not. Panel members informed the group that regulations require that where upstream state affects waters of a downstream state, the upstream state must implement controls to ensure that the downstream standards are met. EPA and neighboring states carry the weight to resolve those interests. Tribal concerns might include that Tribes are not required to submit their own 305(b) report EPA can do it for them. The same rules that apply to adjoining states apply to adjoining state-tribal boundaries. Everything already said applies to tribal lands with the exception that sometimes EPA adopts standards and implements TMDL for tribes.

An individual shared discomfort with the concept of probabilistic monitoring, emphasizing the legitimate attainment decisions need "real data.." Data generated using probabilistic monitoring schemes, panel members recommended, could be used to supplement more targeted monitoring results to make informed attainment decisions. Currently such an approach is not mandatory but recommended. Probabilistic monitoring designs select monitoring sites at random for a given area and the results may not provide sufficient information to list specific waters. Some participants worried about guidance suggesting probabilistic approaches to source identification and urged to be careful about that. One person shared that, with probabilistic monitoring, the Forest Services doesn't identify specific water bodies but types of water bodies.

A participant asked what approaches EPA would suggest for determining the source of NPS nutrient pollution. Differentiating among sources can be very expensive. Listening panel members responded that when water is listed, the potential source of pollution should be identified. Source information provides the public and the agency an understanding of where problem may originate. Following the listing, when the TMDL is developed, sources may be identified in more detail, with quantity of discharge and models constructed based on the location of a source on a stream. This level of detail supports modeling and more effective implementation to achieve load reductions.

Lists and assessment methodologies must be submitted to EPA. EPA's review generally occurs at the regional level. A participant noted that regions often take different approaches to this review and asked if there is a way to improve consistency and to allow successes in one state to happen in others. Mr. Sutfin replied that the purpose of the CALM document is to give some consistency and clarity about what is and what is not acceptable methodology and, hopefully, increase consistency. Finally, an individual questioned if there would be a way for EPA to review rapid changes to the quality of a stream or water body resulting from changes in land use practices outside of the required listing cycle. Panelists affirmed states ability to propose changes to 303(d) list mid-cycle and send them to EPA for approval. One rationale for wanting to retain a category for threatened waters under the 303(d) list might be to identify water bodies vulnerable to rapid changes in land use and development.

Next, the facilitator reviewed the process for the small group discussion and report out to follow the mid-afternoon break.

Facilitated Roundtable Discussions: Improving the Listing Process (Session I)

Following the break, participants engaged in small group discussions focusing on issues associated with the listing process and answering the following questions: (1) What are the pros and cons of the current process used to categorize waters that haven't met water quality standards; and (2) what actions should be taken, by whom, to improve the listing process? A plenary session followed, in which the facilitator drew out highlights from the small group discussions.

What are the pros and cons of the current process used to categorize waters that haven't met water quality standards?

Many small groups liked the idea of combining the 303(d) list and the 305(b) report into a single document, because it would reduce costs and increase the usefulness of the information. Even those supporting a combined approach voiced concern, however, that the purpose of these reports be preserved. The focus of 303(d) should remain on impaired waters that need a TMDL.

One group highlighted that, under the current process, it is up to each state to interpret water quality standards. Thus, states need flexibility to make common sense decisions. Not all waters are created equal so the standards may need to vary as well. One group pointed out that this also may be a negative aspect of flexibility, expressing concern that states may have different standards. Flexibility is needed on a watershed-by-watershed basis instead. Group members shared strong feelings that site-specific standards are nearly impossible to establish; furthermore, use attainability analysis (UAA) is too unwieldy. Several groups discussed regions working with states to give more leeway to come up with site-specific standards; some participants thought this idea might be too difficult to implement. Finally, small groups shared that flexibility should include the ability to focus on the biggest problems.

Participants discussed Oklahoma's list of impaired waters has five hundred thirty-four streams which is in and of itself a problem. The criteria supporting those listing decisions are also problematic. Some small groups felt that the use support assessment protocol (USAP) is a good development in Oklahoma that should be used by other states as well.

Many difficulties also are experienced by states with the de-listing process. The USAP addresses the issue of having all water bodies on the list. Small groups observed that states have to consider all readily available data regardless of source or quality, which is an additional drawback to the current listing process. Many streams are put on various lists using insufficient data, but then are more difficult to de-list due to stringent requirements for de-listing. Some expressed concern that many water bodies shouldn't be on the list at all, especially those placed on the 303(d) list to get 319 funding. EPA should move towards a methodology that is workable for states. One small group pointed out that many listed streams were not listed based on sound, quality data at all.

One small group proposed that misused flexibility (e.g. about "best professional judgment") could also be a root of problems. For consistency, EPA should include guidelines for "best professional

judgment" in the new rule. Some groups asserted more public outreach and participation should occur prior to listing, especially with those citizens living near water bodies proposed for the 303(d) list. Current and proposed guidance also contains "definitional problems" for threatened waters; the new guidance also redefines water quality standards in a manner contrary to statutes. In one small group, participants felt that some current 303(d) lists are flawed in part because they were constructed using informal assessment methodologies. EPA should acknowledge that those lists are different than those that will be developed in the future and, thus, should have different de-listing methodologies.

What actions should be taken, by whom, to improve the listing process?

Small groups expressed the need for EPA to encourage improved and more consistent assessment methodology before the listing process takes place. The public should be involved in reviewing the methodologies, so citizens are clear about how listing decisions are made. Youth education would also improve the future of public awareness. Utilizing more volunteer collection programs (e.g. the Oklahoma Blue Thumb Program) would also increase education and awareness. Participants also suggested that states develop standard monitoring procedures that could be used by volunteer groups.

Listening Panel Feedback

Mr. Crocker noted that participants, including those from state agencies, are concerned about long lists; many waters were listed based on informal judgment calls and a lack of quality information. There is a great need to integrate quality assurance and quality control into monitoring data to make sure that it constitutes a sound basis for listing. Assessment methodologies are big priorities to document decisions: there should be consistency across a given state and to some degree across different states about how some assessment procedures will be carried out. There should be some involvement by EPA, perhaps not approving methodologies, but in supporting best practices. He noted the desire for both flexibility and consistency. Special attention needs to be placed on interstate waters.

Mr. Sutfin shared that he heard signification support for a combined list to increase both efficiency and resources focused on TMDLs. He heard some support for the idea that it also might help to educate the public regarding problems in their waters but EPA should not lose sight of the purpose of the lists.. Participants discussed methodologies with Oklahoma highlighted as a positive example. Assessment methodologies should also be shared with the public so citizens understand about how waters are assessed and listed. Small groups expressed concern about the quality of data used in making assessments and the challenges associated with utilizing all available data, and these issues need clarification. Finally, Mr. Sutfin reflected participant concerns regarding the ability to adjust water quality standards within the context of the TMDL listing process; although the issue can't be solved entirely through a new rule. EPA is aware of this issue and is working on it.

Facilitated Roundtable Discussions: Opportunities for Improvements in the TMDL Program Generally (Session II)

Following a mid-afternoon break, participants joined small groups to discuss opportunities for improvement in the TMDL program generally. Each group focused on one aspect of the program: nonpoint sources, scope and content of TMDLs, implementation, EPA's role, listing and permitting, and gave input on the pros and cons of the 2000 rule and ideas about which elements they would suggest be built on. Following the small group discussion, the facilitator led a plenary report-out to capture the highlights and overall themes.

Nonpoint Source TMDLs

Participants expressed concern about nonpoint source TMDLs, and were interested in a process to differentiate between rural and urban sources. Accurate source identification should occur through the best available science. EPA should also consider cumulative effects in nonpoint source TMDLs. One small group focused on balancing and prioritizing reduction of NPS pollution. It also urged that EPA consider a new category for threatened waters as a target for data collection. Group members proposed adding a preventative tracking mechanism to the new list.

Another group began its discussion from the premise that EPA doesn't have the legal authority to do NPS TMDLs; group members felt guidance not regulation was needed.

Some felt states will not reduce NPS pollution unless they are given a compelling reason to do so. Some participants expressed concern that states cannot implement nonpoint source TMDLs without adequate enforcement ability. Others strongly supported the voluntary nature of nonpoint source programs and worried about the TMDL program creating an enforcement-like environment for these programs.

Thinking about implementation as part of the listing process is a great need. The list should be more user-friendly in general. Some participants also shared concern regarding the TMDL timetable. Funding has not been provided to states to implement the program. One small group proposed EPA fund public participation processes.

Several individuals in small groups felt agricultural sources were not equitably treated. Some felt confined animal feeding operations are regulated but other agricultural operations are not. Another's members discussed how the new rule affects small farmers relying on the EQIP program. Many farmers use best management practices and technology transfers to reduce nonpoint source pollution.

The group also discussed validation monitoring after TMDLs and suggested that at some point the standard may need review and change. Some participants discussed listing every 4-, 5- or 10-years based on the rotating basin cycle.

One group supported the distinction between pollution and pollutant in the 2000 rule.

Finally, one group recommended that best available technology be applied with agricultural best

management practices. Participants asked how to relate a water quality endpoint or TMDL and how to address atmospheric deposition in a TMDL rule, suggesting that TMDLs may not apply to that issue.

Scope and Content

With regard to scope and content, participants discussed the need to address which parameters and pollutants are suitable for a TMDL and which are not; some may need to be treated differently. There should be "offramps" to the TMDL highway. One small group discussed the scope of a TMDL in terms of an implementation plan. Some agreed that the implementation plan should be a second step (requirement) instead of an element of the TMDL itself. EPA should develop guidance on allocating loads between point and nonpoint sources. Finally, EPA may need to address ground water and surface water interaction.

Implementation

Participants in many small groups agreed that implementation is a necessary element of a TMDL process, however some group members felt that written implementation plans should take place as a second step, after of the development of the TMDL. Others shared a different view: implementation plans should be part of phased TMDLs. Public input into the plan and EPA oversight are necessary to ensure water quality improvements will take place. Another small group noted that a positive aspect of the 2000 rule was to require that implementation plans specifically address sources and pollutants.

Waters listed for biological impairments pose a special challenge. Some participants felt that the timeline for TMDLs is unrealistic. Others proposed new data and a phased-in approach to overcome current problems.

EPA's role

A small group asserted that implementation plans should not be part of the TMDL; they constitute a useful but not "approvable" component by EPA. Group members voiced concern about establishing reasonable criteria for nonpoint sources.

Many issues would be better addressed through guidance, oversight, and coordination with regions. Standards should be created on a watershed basis, especially where they cross state lines. Regions should foster clear communication and information-sharing between states. Several downstream states are not currently coordinating with upstream states and vice versa.

With regards to delisting, participants in one small group felt that regions need to follow the EPA headquarters guidance and regulations regarding how much information is needed to list and de-list, and the same rules should apply. Listing and delisting should be like a door that opens both ways. EPA and the states also should encourage public participation in listing and the TMDL process. Participants

in one group agreed that public participation is necessary but shared different ideas about the appropriate scope and amount. There was consensus that the public has the right to know and EPA has a role to make it happen.

Some participants reminded EPA that guidance does not constitute regulation or mandatory duties. One group unanimously agreed that EPA should not have the authority to take over administratively continued permits.

Listing

One group highlighted the statistical approach proposed by several states and recommended by the NAS. Currently, EPA uses the "raw score" approach, which contains some flaws. Group members agreed if sample size is not considered, a straight threshold of ten percent doesn't make sense. The binomial method is simply "hit or miss." Others shared concerns about the probabilistic approach: probabilistic assessments should not be used to list waters on 303(d). Concerns were also expressed about national consistency for making data available; there is currently no readily available mechanism to bring together all available data and to deal with quality assurance and quality control issues mentioned earlier. Some participants proposed that EPA should approve methodologies developed by the states; general guidelines could be used for others that do not do so.

One group recommended additional routine monitoring by local sources, and to explain what the data means to people in the basin.

Some participants asserted that once new methodologies are in place, states should start over and make new lists, rather than being forced into going through a formal de-listing process. An alternative would be that delisting be allowed and that just cause for delisting include situations where data doesn't meet requirements under the new methodology. Others suggested that delisting should be allowed on a pollutant-specific basis where appropriate. Many participants recommended not automatically placing waters with "insufficient" data on a 303(d) list. EPA should clarify the decision-making process well in advance for the approval of lists and regions should be required to follow a consistent approach, suggested one small group. Alternatively, when one state has an approved list from a region, other states following the same procedure should also be approved. Others urged EPA to inform states in advance whether they have good methodologies or not. Some have methodology different from CALM; participants expressed concern about how EPA would view states that continue to use their current methods. Similarly, the concern was expressed that some methodology may be adopted legislatively and would be difficult to change. Some participants suggested that states ask EPA to indicate that the methodology has been approved. Finally, EPA should identify a specific process to allow delisting mid-cycle.

Permitting

Participants raised the issue of the financial burden of the TMDL programs on small communities. The

scientific basis for incurring costs to reduce pollutants may not be obvious, asserted some. Allocation of costs for reductions should be conducted more equitably. One small group supported public review of the listing methodology. Participants also pointed out the challenges of not being able to issue permits for a facility in absence of a TMDL; there is also confusion in addressing offset requirements.

Listening Panel Feedback

Mr. Craig shared that he heard many comments that public participation is probably inadequate in states' development of methodologies, assessment of data, listing and de-listing. The new guidance addresses public participation to some degree. Participants had conflicting opinions about the guidance in existing rules and how it is interpreted from one region to the next. Many supported the need for an implementation plan that clearly identifies sources where pollutants come from, and how to reduce them, but Mr. Craig heard differing opinions on whether the TMDLs themselves should include implementation plans or not.

Mr. Sutfin pointed out participant comments about consistency across state lines and the role of EPA. Many participants share an interest in public participation and enhancing the public's ability to understand the TMDL and listing process. There was some support for the listing cycle to follow the five-year rotating basin approach. Mr. Sutfin heard the concern that some pollutants may not be suitable for TMDLs, and noted a provision in the Clean Water Act giving authority to the administrator to determine whether a pollutant is suitable or not. That issue should be addressed in the new rule or in guidance. Many participants agreed on the importance of establishing a policy for issuance of permits in listed waters before a TMDL is written but could not reach a solution for how to carry it out given the constraints of the Clean Water Act. Mr. Sutfin shared an interest in hearing additional ideas along those lines.

Day One of the Listening Session adjourned at 6pm.

Day Two – Review Agenda and Follow Up on Questions from Day One

As Day Two of the Listening Session began, the facilitator opened up the discussion for participants' reflections on Day One. A participant shared hopes that the guidance will be flexible enough to integrate ideas presented at the session. She reflected and expressed support for additional public input and scrutiny especially in the area of assessment methodology; allowing interim revisions (for delisting or additions) could become an important component if EPA sets a longer listing cycle to alleviate the pressure of developing a list every two years. Another individual voiced concerns about the use of language included in the presentation in which "standards" and "designated uses" were used interchangeably in describing the provisions of the proposed new listing guidance. A water quality standard consists of designated uses, criteria to support those uses and an anti-degradation policy.

Another participant thanked EPA and the State of Oklahoma for holding these meetings. He suggested the need also to meet with National Resource Conservation Districts and other agencies to build better

science and cooperation prior to the development of requirements and regulations. He noted that the agricultural community has a much greater awareness of water quality problems, and is serious about working on them. However, adequate time and resources are necessary to phase in any new programs to allow farmers and ranchers the time to adjust. Finally, group members requested a summary of the comments Tracey Mehan's made before Congress on November 15th by email. Listening Panel members and EPA staff agreed to try to distribute the document as requested.

Facilitated Roundtable Discussions: Scope of the Listing Process (Session III)

Following the break, participants engaged in small group discussions on the scope of the listing process. Discussion focused on: (1) What should be the scope of the listing process; and (2) What should happen to waters with insufficient information to make a credible determination? A plenary session followed, in which the facilitator drew out highlights from the small group discussions.

What should be the scope of the listing process?

Several small groups focused on the designation of threatened waters and the need for definitions, generally. Threatened waters should be categorized so money and monitoring efforts can be targeted specifically to them. Being more proactive in sampling and monitoring should determine if a water body should be off the list or not. Some thought that threatened waters should be on a separate list from impaired waters and that EPA and the states also should fund efforts to prevent problems before the water body gets impaired. Other participants felt that threatened waters should be included in 305(b) to indicate their fragility.

Another group echoed the need for a definition of threatened waters, and suggested a methodology be developed for their identification. Not all states have the vocabulary or use the term "threatened waters." Other participants proposed that EPA should leave the issue up to the states, many of which have differing views about what constitutes "threatened." If EPA decides to address definitional issues, it should do so with great flexibility. If a state decides to be proactive in some waters, it may include threatened waters in its list and could define in assessment/listing methodology for how it will make those decisions. To deal with de-listing concerns, states should implement the planning list concept, recommended some participants, to identify water as potentially impaired and to target additional data collection.

Several groups repeated their support for the idea of an integrated list. They also noted that developing these reports within a two-year cycle is extremely resource-intensive and needs to be addressed. An integrated listing process also makes sense from an administrative perspective, combining public participation processes etc. to be more efficient and streamlined.

Focus on getting accurate data for standards and water quality goals, suggested others. Many states do not have the financial resources to fund the data collection. A web-based database could be set up for collecting monitoring activities from stakeholders.

EPA should facilitate a tiered approach in which states can continue to focus on their watersheds or streams of interest.

What should happen to waters with insufficient information to make a credible determination?

Some participants proposed that placing waters with insufficient information for 303(d) listing on a separate list, so that TMDLs focus on waters with documented problems. Others expressed concern that waters not going on 303(d) list will be forgotten. For some, the preference would be to remove waters without credible data from the 303(b) list. Others worried about wholesale delisting.

Several groups noted that there are two types of waters with insufficient data – some with data indicating a potential reason for concern, others with no information, and suggested that this category be divided to reflect these differences.

EPA needs a method to prioritize monitoring activities for streams. EPA should conduct monitoring and hold stakeholder meetings to discuss the status of the issues. On the macro level, EPA should standardize the methods necessary to generate and use quality data as the basis for its decisions. EPA should not require monitoring each individual segment included in Category 3. Extra monitoring necessary may justify only having the report come out every 4-5 years.

Listening Panel Feedback

Mr. Craig reflected that many participants concentrated on threatened waters and the need for flexibility at the state level to define them, deal with them and prevent impairment. Many felt that threatened waters should not be placed on 303(d) list because they are then subject to too rigid an interpretation. There was a suggestion made to divide Category 3 into sections (a) and (b) some data and no data, respectively. There is confusion and conflict in that there are so many waters in the list; states want to manage better but find delisting difficult without monitoring to justify it.

Mr. Craig also heard the interest in redefining "threatened" and/or "impaired" to address the confusion about what it means. While threatened waters are not mentioned specifically as a focus in the law or 303(d) list, if EPA or the states have the data to indicate that the water body is threatened, they should pay special attention to it and funding should be made available to address problems. New 319 guidance calls for states to use portions of 319 funds for threatened water bodies to keep them from becoming impaired. The small groups at the Listening Session all shared a common belief that threatened waters need to be tracked, monitored, and, if possible, find ways to correct problems prior to impairment. Many individuals also liked the idea of combining the 303(d) list and 305(b) report so states are truly tracking all waters and each has a category to fit into. Participants also discussed funding challenges and their interests in finding funding to carry out the most critical programs.

Mr. Sutfin echoed participants' reflections on the importance of threatened waters for prioritization and

additional monitoring. He suggested EPA review subdividing Category 3 into two parts. Mr. Sutfin was impressed with the participants' understanding of monitoring issues, and with the overall thoughtfulness and quality of input.

Facilitated Roundtable Discussions: Other Aspects of the Listing Process, such as Timing and Public Involvement (Session IV)

Following the mid-morning break, participants continued to engage in small group discussions focusing on: (1) How frequently should the list of impaired waters be submitted, and why; and (2) How can EPA and states improve public understanding of listing decisions and, therefore, increase the public's involvement in the TMDL program? The facilitator drew upon key points and issues during a plenary report-out.

How frequently should the list of impaired waters be submitted, and why?

Some participants recommended a five-year listing cycle to match the permit cycle in many states. Oklahoma has a monitoring schedule using a rotating basin approach. For those that want to include bio monitoring, the five-year cycle also would allow more time to collect and analyze that information. Some participants asked how EPA could meet its statutory duty to report 305(b) every two years? EPA could allow for interim updates provided every 2 years, through an electronic update process, and create enough flexibility for states to do such updates only if they needed to. Others expressed agreement with interim updating, but felt that until states have methodologies in place and monitoring done sufficiently on all water bodies, they should submit updates to EPA every two years.

Some groups proposed extending the cycle to every 4 years, to coordinate better with the 305(b) timeline, as long as the interim reporting is done if necessary. Others agreed, suggesting that if the ultimate goal is achieving the best data possible to make a decision on listing, EPA should not let the frequency of the reporting procedure hinder that process. With regards to public involvement, several participants felt that the most critical point occurs at the time of the development of a methodology document supporting listing decisions.

Other participants advocated for a two-year cycle, in spite of the administrative burden it creates, especially if a list must be rebuilt. If EPA moved to a four- or five-year period, an interim adjustment would need to be put in place to list or delist, and would require public hearings. A group advocating for a five-year cycle agreed that someone should examine trends within the five-year window.

Texas is a good example of a model for data collection involving federal agency partners, industry, stakeholders and third party monitoring.

Overall, several participants pointed out that seeing water quality changes in a water body is rare within a two-year period. Within that time frame, states may not even have a chance to collect data. Extending the time period would help alleviate the lack of data.

How can EPA and states improve public understanding of listing decisions and, therefore, increase the public's involvement in the TMDL program?

Some participants pointed out the urgent need for adequate funding, which most states do not have. An individual suggested directing funding to an umbrella not-for-profit organization to facilitate the public participation processes in the state. Special interest groups' concerns sometimes bias public perception and should be countered by providing a more accurate picture. More public education should happen at the local level; the public should have the option of participating in listening session or public education sessions. Local authorities should tailor the state information on impaired waters to their specific community. Several participants agreed on the importance of involving stakeholders from the beginning of the process (the developing of methodology itself), and proposed utilizing existing programs (e.g. education and outreach) on the local level. More time also is needed for public review. Some felt that credibility and consistency are the two most important aspects of good public involvement. Each state environmental group could have a designated individual or people designated to public outreach. Accessibility of data also is important. Each state should have the 303(d) list available for anyone electronically. Data should be available in maps or by common stream name so the public can understand it; it should be released county by county to the public library or extension office so local citizens can access it. Finally, one small group proposed active involvement by stakeholders through a multi-agency, multi-disciplinary group involving various stakeholders in the process to identify and collect data and review it so that once decisions are made, the information utilized does not surprise organizations. Thus, many stakeholders will also have had an opportunity for involvement in the decision-making process.

Listening Panel Feedback

Mr. Sutfin noted that participant feedback on the listing cycle was diverse, with each point of view having a good rationale. It may be a good idea to increase the frequency of the cycle or encourage interim updates while the list is changing rapidly, while implementing a longer listing cycle later on as things stabilize. Participants expressed strong support for more public participation with an emphasis on early participation beginning with the data collection stage and continuing through the listing decision. Special emphasis should be placed on partnering in the development of the methodology. Mr. Craig underscored the major theme that the time has come (or is past due) for states to develop methodologies for making determinations instead of making determinations and then trying to justify them. A step-by-step plan is needed to achieve greater credibility, with improved methodology to get and utilize data and determine which water bodies should be listed as impaired. Finally, states should not develop a program and then roll it out to the public in two or three days. Some states have not adequately involved the public in their decision-making, causing suspicion and distrust.

Mr. Crocker pointed out that states and other organizations are in favor of a longer listing cycle; participants highlighted the concept that interim updates could serve to satisfy EPA statutory requirements regarding 305(b). Interim updates and/or changes could be submitted as needed on a case-by-case basis. Mr. Crocker also asserted the need to get the public more familiar with the

process for managing water quality in states and to involve cooperative extension offices and existing organizations well-suited to initiate that type of outreach. Materials and information should be made more understandable to the public and could be accessed through libraries.

Plenary Discussion: Remaining Issues

A participant informed the group that 2002 will be the 30th anniversary of the Clean Water Act and a coordinated national celebration of the event will be sponsored by America's Clean Water Foundation. Oklahoma has undertaken the coordination for a national monitoring event and should be commended for its efforts.

An individual reiterated the importance that the length of the listing cycle be lengthened to fit with other cycles. Many participants expressed an interest in public involvement and input in the process, which requires a great deal of time. Finally, a participant pointed out that although the Listening Session has followed a good process, the small groups have tended to focus on areas of consensus. It will be important for EPA to read the individual comment sheets to gather all of the information from stakeholders about their views and opinions they may not have had time to address.

Wrap Up/Next Steps

Mr. Sutfin informed the group that one more Listening Session will occur in Washington, DC on December 11th. It may follow a somewhat different format than the first four due to the number of participants expected and the goals to synthesize efforts at the other sessions and for EPA to react to those comments within the context of the overall TMDL program. EPA staff is very willing to visit and speak with individual groups wanting to learn or hear more about the TMDL program and/or express their individual view. Overall, Mr. Sutfin expressed appreciation for the number of attendees as well as their level of discussion and willingness to express individual points of view and listen to one another. Finally, he thanked Oklahoma EPA for hosting the event, the participants for their time and ideas, and the facilitators for their efforts. Mr. Craig added a special recognition for Mr. Sutfin for looking for gaps in the TMDL process and seeking solutions.

The meeting adjourned at 11:45am.

ATTACHMENT A
US EPA TMDL LISTENING SESSION, OKLAHOMA CITY, OK
November 15 - 16, 2001

Theme: Listing Impaired Waters

PARTICIPANT COMMENT WORKSHEETS

Session One

What are the pros and cons of the current process used to categorize waters that haven't met water quality standards?

- pros - not prescriptive - states have flexibility in method
- cons - lack of consistency within and among states regarding listings
- cons - need stronger standards. Need clearer process for listing, delisting, more participation
- cons - lack of integration with local agencies that interact with landowners
- cons - need better focus on waters
- cons - lack of consistent data requirements
- cons - many waters listed that shouldn't be there
- cons - poor stakeholder involvement
- cons - lack of transparency
- cons - beneficial uses not adequately evaluated
- cons - lack of funding to get necessary data
- cons - 303(d) list every 2 years is resource intensive. Money should be used to increase water quality
- cons - need more focus on targeted data collection
- pros - allows states flexibility in responses
- pros - allows states to focus on specific problems
- cons - does not identify the methodology for listing of 303(d) list
- cons - updates each 2 years is inefficient. 4 years is better
- the current listing process allows the states enough flexibility to assess data and list in accordance with state priorities
- there are no consequences for EPA's failure to meet the 30 day statutory deadline
- no way to realistically measure all water in state for classification
- difficult to use a methodology for both lists to classify water - maybe combine lists?
- list is regulatory, not priority
- unclear what EPA wants the state list to be comprised of
- determining what bodies/segments to put on list seems arbitrary
- previous listings were inconsistent and not supportable by good data. Delisting process is difficult. The current process strives to be more consistent and to require that data is defensible. This is critical at state and federal level
- states must have consistent guidance but must also have flexibility to focus on state-identified priority problems and watersheds
- current listings may come from windshield inspections or surveys. No scientific methodology got them on but it does require scientific methodology to get it off if not impaired. We don't have the budget to monitor everything

- no consistent process among the states and region
- no delisting process
- appeals process needs defining
- water quality standards should be set to keep river water clean as it was before being impacted by users such as cities, hog farms or other economic interests
- cons - many streams are on list with no data to support impairment; the past process has been chaotic. Bad or no data. No scientific methodology back then, but is coming now
- cons - the cost. You can't have a rigorous process without enough money to implement it! Chaotic process needs streamlining. No good way for average person to understand where bad streams are or why they are bad. Data is inaccessible
- cons - current process is based on the preponderance of nebulous, unreliable water quality characterization data
- cons - non- achievable; beneficial uses; non-acceptable, low quality data; anecdotal data are driving a process in some instances in many states; that will dictate expenditures of millions, even billions of dollars based on opinion or on antiquated, unreliable, indefensible data
- hydrologic data is often unavailable (flow) and critical to quality of end product
- program-wide DQO's are needed, along with schedule and costs
- not all waters are equal and standards should be different for each stream or river
- voluntary compliance to improvements
- prioritize problems based on what water supply is most important considering drinking water first
- cons - definition of "sufficient" data used for listing decisions is left up to the states; need some neutral oversight agency
- methodology needs to address watershed-scale impairments, not only state-wide impairments
- by not including threatened waters on the lists, encroaching development is not considered which may impair waters in the near future
- interstate cooperation to set overall standards
- general categorizing of possible pollutants and sources
- focus on listings (impaired waters) that need addressing 303(b), 305(b) listings need to be re-analyzed for impairments
- must list threatened waters based on changes in land use practices, e.g. development, CAFO installation
- should include on TMDL list, water bodies that have poor water quality due to water extraction
- criteria for listing, delisting needs to be more scientific, less political
- consistency of monitoring processes across state lines, need interstate cooperation work across state line, watershed basis
- need long term remediation process state flexibility of standards but national floor minimum standard
- lack of consistency is a problem; watersheds are different, but have similar characteristics. Standards are critical, along with regulatory enforcement
- pro - implementation across state lines
- pro - fosters interagency partnering - need public involvement in list development

- pro - TMDL process is good idea, but difficult to implement - better than nothing
- lack of monitoring data - need more, yet can't take no action as an excuse for no data
- should be listed as impaired even if sources of impairment isn't known (there must be something done if it's clearly impaired)
- there are many cases, particularly in effluent dominated streams, where the designated uses are unattainable, so a segment is listed as impaired while it actually has an unattainable designated use. This means that TMDL will not be successful and is an inappropriate use of resources. The UAA and site-specific standard should be encouraged by EPA prior to listing segments with inappropriate designated uses
- it used to be that to get 319 money, a water body had to be in the 303(d) list, so states rushed to put as many water bodies as possible on the 303(d) list to be able to cash in on 319 money. There was no discriminating process for putting water bodies on the list and no down side either. Until EPA started to be sued for not enforcing TMDLs. Now states have 303(d) lists littered with water bodies for which there is little or no data or information. There has to be a forgiveness period to allow states to clear up the 303(d) list before beginning the new listing methodology
- con - lack of consistency - need stronger and more effective regulations
- don't delay or weaken July 2000 rules - need public participation in delisting, need more consistency in listing and delisting process. All states should be publishing same kinds of pollution testing results
- pro - some QA/QC assessment is required
- pro - list every 4th year
- pro - state must submit listing methodologies
- con - does not prevent abuse of "best professional judgement" - does not prevent abuse of "flexibility"
- con - allows listing based on symptoms, e.g., algae
- con - allows arbitrary and inconsistent application of criteria
- con - causes confusion, since there is currently no listing or delisting methodology
- con - no data quality or quantity standards
- beneficial uses are too hard to reclassify
- some feeling that UAAs are too unwieldy and expensive to make use of
- many feel that site specific standards are nearly impossible to achieve
- inconsistent listing methodologies
- states have to consider all readily available data no matter what the source or quality - BIG PROBLEM
- inconsistent definitions - guidance, 305(b) and 303(d) threatened - partially impaired - uses vs. standards
- water qualities vary among states - must change standards - need to coordinate with water qualities revisions schedules (3 yrs)
- pollution vs pollutant - don't think waters impaired by habitat degradation or hydrologic modification should be ignored. Should base listing on impairment not the source
- listing water bodies for symptom instead of pollutant (algae). Need listing for specific pollutant

instead

- delisting may also be too arbitrary
- incorrect use designations are a problem
- pro - quality of data now considered
- pro - need more quality assurance
- pro - need more back-up information to listed waters (why listed)
- "best professional judgement" is a blank check. Need better explanation, definition and limitations
- listing methodologies are too nebulous
- public information and disclosure
- offset in 305(b) listing vs. 303(d) listing a plus
- listings sometimes made without approved water quality standard
- pros - standards set and approved in hopes of catching water bodies before they become impaired - new process is trying to improve consistency in listing process
- cons - inconsistencies between states and between EPA regions; process may not protect waters that are not yet threatened or impaired; early listing of impaired waters were not necessarily accurate - the process in difficult to delist those without data; limited funds to gather data to support listing or delisting
- cons - insufficient monitoring data available for assessment
- cons - starting point for (designated uses/criteria) assessments are inadequate
- cons - don't adequately address natural conditions in criteria
- cons - UAA and SSACs too administratively burdensome
- cons - need further refinement of designated uses/classifications (urban streams/wetlands/ canals)
- conversely - don't adequately protect special waters and generally found that listed waters are impaired
- perhaps EPA should require or allow UAA at time of assessment - EPA should facilitate/ support states
- pro - one person supported threatened waters - but others did not
- pro - general support for 303(d) as subset of 305(b)
- pro - impaired by biology and no pollutant - disagreement
- some think need to recognize that previous lists are "impaired" and should allow waters to be moved to other categories
- resources lacking for comprehensive monitoring
- coordination - in OK, many agencies have responsibilities for monitoring
- 319 - targeted to nonpoint source monitoring (not same goal as 303d), not reporting point sources - once again, coordination problems
- monitoring - now at least identifies waters not meeting standards, but doesn't identify sources, causes
- good - use support assessment protocols - used to interpret water quality standard
- list is not user friendly, especially waterbed ids and supporting data
- delisting - very difficult to do

- new combined listing structure is helpful/flipside - lots of paperwork for states
- probalistic monitoring - only ids general trends - types, percents - good for 305 (b) and targeting additional monitoring, but not good for 303(d)
- 303(d) combination with 305(b) lists - good!
- listing of all waters in a state is a huge undertaking of limited value
- current state to state listing practices produce disparate criteria for listing and thus significantly different lists
- pros - up to states to interpret standards - flexibility of local good common sense decisions
- cons - flexibility has caused many states to get sued
- no set standard (federal) for interpreting water qualities and applying to body of water/ most states don't have one either
- cons - it ignores the sources
- cons - stream needs supporting evidence
- pro - is a standardized process - fosters interagency cooperation
- con - need more public involvement
- con - need uniform protocols
- con - need data to document listing
- con - should have public review of data
- many segments listed for wrong reasons - money, goals / uses unrealistic, thought that should be impaired / threatened - difficult to remove listed segments
- pro - good starting point
- current process ('98 guidance) allows too many streams to be listed without supporting data
- in 1998 experience, EPA heavily scrutinized state delisting decisions, but gave little consideration to waters added to the list
- in 1998 experience, true sources of pollution weren't identified and some industries were inappropriately labeled as sources of impairment. Plus some within a particular category are unduly burdened with restrictions because of a few larger polluters within same category
- Oklahoma's 303(d) list contains many water bodies that should have never been listed
- con - poorly developed water quality standards. Lacking in many areas including sediment and nutrients. No real attempt to tie effects (true impairment) to concentrations
- con - poorly developed databases - monitoring skewed towards impaired waters out of necessity of addressing 303(d) listed waters. Gives the improper perception that a larger percentage of the state's waters are impaired
- no means to delineate between waters we were "sure about" - had enough data and good water quality standards - and those we just thought about
- cons - the process seems to focus on a TMDL as the only "real" mechanism to solve water quality problems
- pro - to some degree, each state has the capacity to design it's own listing process. Unfortunately, sometimes this is also a con
- a substantial number of waters currently on 303(d) lists in Florida and across the country have been listed as impaired based on little or no credible scientific data - the listing process must be revised to provide that waters can be listed based only on objective and credible data or

information. It is inappropriate to make listing determinations based on basin assessments (i.e., land use data) or probabilistic data (i.e., derived relationships based on rainfall events); instead, water segment-specific data or information regarding the chemistry or biology of that water segment should be used

- a time limit should be placed on this data (no longer than 5 years), since the goal is to identify current, as opposed to historic, impairment.
- a mechanism must be approved for removing waters from existing 303(d) lists for which there is insufficient objective and credible data indicating violations of standards (such as express recognition by EPA that waters that do not meet a subsequently adopted state listing methodology can be removed for "good cause"

Individual Notes - Session One - First Question

- cons - state assessment and listing methodologies can be adopted that set a very high bar for the quantity of information necessary to list a waterbed the 303(d) list; thus, many waters currently on the 303(d) list will be moved to the category "needs more information". There is no guarantee that states will follow up by monitoring all these water bodies and therefore, polluted waters moved to this category may never receive a TMDL (or at least, they wouldn't receive a TMDL for a very long time). Also, waters in the categories 4a - 4c need to be included on the 303(d) list. Again there are no guarantees that these waters will be cleaned up in an appropriate period of time
- cons - not all waters are created equal and standards should not be either
- voluntary monitoring
- when pollution is not critical, then modify TMDL
- credible and reliable data to determine source
- states should develop standard monitoring program (where multiple agencies involved)
- inconsistency in "threatened" waters - 303d and 305b
- presently must list waters impaired by "natural" sources - acidic rainfall, manganese from erosion
- pro - provides national consistency
- con - QA concerns over use of volunteer data for 303(d) listing purposes
- con - waters should not be placed on 303(d) list based on no data (319 drive-by assessment) or probabilistic approaches only
- integrated report concept is good
- lack of monitoring data
- starting point of what is appropriate designated use - special waters protection inadequate - conversely, don't adequately address natural conditions - inadequate criteria - need further refinement of designated uses / classifications - urban streams / wetlands / canals
- cons - willy nilly process - inadequate data subcategories of water bodies - current methodology inadequate
- pro - really nice idea; give states credit for working out good faith

What actions should be taken, by whom, to improve the listing process? (e.g., ways to improve data and information to support listing decisions? Approving methodologies in advance? Allowing listing only where sufficient monitoring data exists, etc)?

- support states
- request 3rd party data that meets QA regulations to meet needs of lists and reports
- state should have protocol for data quality
- states offer training for testing
- Nebraska can use 106 money to provide training for folks to do monitoring
- available data source
- should list only where adequate data exists - what is adequate? - use weight of evidence approach to balance information re chemical, biological health
- methodology and clear threshold for impairment should be clearly established through public participation program
- methodology should be done in advance of listing
- EPA in effect approve methodology when makes listing decision, so should approve before listing so states know they are doing lists the right way
- keep fishable/swimable - obtain water qualities in best possible way - if TMDL won't work, use other methods
- can use biological data if objective measurement adopted into water qualities
- resolve tension between chemical standards and biological desirability - what type of fish population do you want?
- use local data
- better integration with state and local agencies to get data necessary to make listing decisions in scientifically sound manner - more funding to state and local agencies
- consider 3rd party data with state defined protocol for monitoring data to be used with decisions
- EPA should approve listing methodology before the lists are submitted
- use of local government agencies to collect data
- consider using 3rd party data for listing decisions if data meets monitoring criteria. Possibly use data as a litmus test. Use state and federal water quality standards. Have an approved methodology for impairment decisions. This should be a formal methodology. Types of data? Should priority be given to objective standards? What is flexible?
- EPA in all practical purposes approves the methodologies assessment via the list. Therefore why not approve the methodologies. This would give the states a good idea whether or not the list is will be approved. The intent of the Clean Water Act (fishable - swimable) must be kept in the forefront. Doing this will let states use existing programs to address water quality concerns. Monitoring needs to be sufficient to answer questions
- improve scientific standards and a more uniform requirement to measure flow, pollution, site specific data, etc
- improve public participation, education, awareness to recognize segments that are listed (especially adjacent landowners)
- improve use attainability standards
- I support rolling 303(d) list into 305(b) report - this will reduce confusion and capture

information in one place. I agree that EPA should approve listing methodology in advance. I support the concept that before a water body can be shown or impaired, there must be sufficient and credible monitoring data available. For waters where data is not yet available, develop a method to prioritize them for a follow-up monitoring program. I prefer the concept of "innocent until proven guilty" rather than the reverse. Instead of asking states to prove that a water body should be delisted, just ask the states for their lists when data supports their listing. If some drop off, so be it!

- approve methodology so regions can not impose varying rules down the road. Encourage consistency. Delisting is currently too cumbersome. The process must be relaxed and streamlined
- consistent methodology and listing process
- follow NAS TMDL report
- QA / QC for sampling
- UAA for designated uses of all state's waters
- need delisting process between listings
- look at one river at a time
- Yes - allowing listing only where sufficient monitoring data exists is a way to remove erroneously listed streams without spending thousands of dollars on sampling! Save the money for streams with known impairments - what are the causes and sources? - and implement TMDLs. But, EPA won't let us remove streams without sampling data, even ones with no known reason for listing. Or EPA should provide the money to sample enough
- the water quality management procedures should be integrated, upstream and down; e.g. begin with review of designated uses, achievable, applicable standards; adequacy and representation of data sets, including gap analysis; UAA; targeted and representative monitoring; data acceptance; modeling (predictive); sensitivity and error analysis; probabilistic analysis of trends; standards for data records; use of national standard database structure, reliability or confidence limits around each specific allocation
- EPA should publish minimum content guidelines and model state methodologies
- EPA should publish performance-based minimum standards for monitoring, data analysis and review, data acceptance, data reduction, modeling, and cause and effect analysis independent of cost; cost is a prioritization decision point, not a basis for conclusions being based on non-acceptable data
- the basis of listing methodology should be rigorous, detailed, reproducible with little room for interpretive error or bias. Risk assessment methods should be used for both listing and prioritization
- EPA and public should review and approve listing and monitoring methodologies and schedules
- combine 303(d) and 305(b)
- data quality must be improved
- education
- states should be in charge of monitoring and listings process
- state agencies should encourage the incorporation of citizen data in listing decisions
- delistings should only take place when good quality and quantity data show that the waters are

meeting water quality standards

- listing methodologies developed by the states need to be put up for public comment
- need a body that provides neutral oversight in state development of listing methodology
- monitoring data to support listings and delistings by state
- methodology listing by source / use
- one agency responsible for monitoring and enforcement of standards - this should be EPA /DEC. Dept. of Ag is not a realistic agency to monitor and enforce agricultural pollution because enforcement breaks down their ability to work technically with farmers
- where data is insufficient, could list water bodies as threatened based on land use threats
- engage the public more, particularly as restrictions, zoning or regulatory compliance becomes part of the approach
- strong, sound scientific data demonstrating impairments
- need uniform assessment protocols vs flexibility for tailoring
- public involvement in listing process
- EPA must not delegate this program to the states. EPA must retain oversight. We wouldn't be debating this if state agencies had done an adequate job. The only reason the TMDL lawsuit got dismissed in OK was EPA's submission of a DEQ letter stating that they'd done 85 TMDLs - in reality, non had been done - these were wasteload allocations. To date, TMDL development by ODEQ has been a farcical exercise in incompetence
- translation of narrative standards should be a clearly adopted state rule to implement the standard
- listing should be based on monitoring data, not probabilistic modeling or evaluated data
- weight-of-the-evidence approach should be used when multiple types or sources of data are considered for listing
- the 5 part 305(b) list is a big improvement over the 4 part 303(d) list
- listing criteria should not include the affects of removing water from a stream for beneficial use
- claimed "existing uses" should be corroborated with data
- the requirements for delisting should be commensurate with requirements for listing
- approve methodologies in advance
- should have burden of proof in proving a water body is clean instead of assuming clean until proven dirty. This provides the maximum health protection with little cost - just assessment for waters that need attention
- keep listings transparent; link each waterbed to the methodology
- use only criteria or narrative translator adopted by rule or statutes
- provide guidelines for "best professional judgement", e.g., a panel of professionals with different backgrounds and listing must be based on consensus. If no consensus, put waterbed on a "watch list" or "preliminary list". Provide similar guidelines for "flexibility". Don't list Tier 3 (antidegradation) water bodies. Keep anti-degradation policy separate. Allow delistings for incorrect beneficial use designations. Delist if a water effects ratio is developed. If it shows there is no impairment, standardize data quality and quantity criteria. Delist if TMDL document is approved. Delist if control measures are already in place or expected to result in attainment of WQs. Don't list if waterbed is primarily affected by air deposition. Make sure biological

data is linked to a pollutant. States must re-evaluate the designated beneficial uses of water bodies with restricted access, e.g., flood control channels like Los Angels River

- EPA should recognize the validity of a 2 step listing approach, as recommended by the National Research Council and as provided for in Florida's new Identification of Impaired Surface Waters rule
- the preliminary (or planning) list serves as a mechanism to identify those waters that might not be attaining water quality standards and identifies those waters as requiring further data collection
- the approved (or verified) list - the 303(d) list - contains only those waters for which sufficient objective and credible data or information demonstrates impairment
- there must be sufficient monitoring data for all waters on the verified list; waters with insufficient monitoring data would be place on a planning list if the available data or information indicates that the water might be impaired
- reduce delisting requirements to be commensurate with data and methods that were used to list waterbed, i.e., if it was listed with BPJ, it shouldn't take $10,000 worth of monitoring to delist it
- allow use of volunteer collected data if appropriate QAQC is used
- EPA needs to follow listing decisions which they have approved
- EPA should require listing methodologies to have public comment
- collect data - use citizen data - there is a way to have QAQC and proper training
- it is everyone's responsibility, including industry
- make rules known to everyone
- alarm system to bump to someone else
- adjust data collection methods to address high flow vs. low flow
- some want planning list based on first kills
- coordinate among agencies
- test and verify methodologies before you force others to use it
- each states listing methodology should go out for public and EPA comment well before the lists are submitted. Adds credibility - minimum 90 days to a year prior to listing - maybe more
- some think EPA should approve / disapprove states methodology; others think EPA comment deadline is more appropriate
- biological data should compliment water quality data
- educate the public, especially our youth - this will help with awareness and data collection in the future
- increased use of volunteers - collected data
- EPA improving consistency of listing methodology between states
- data sufficiency needs to be addressed
- support age limit - need data representing current conditions
- need QAQC
- need accurate source identification
- need more monitoring, especially to address seasonality
- support preliminary and action list concept
- states need to develop methodologies (USAPs) that fit unique features of state

- require credible data
- refine designated beneficial uses - make sure appropriate for waterbed - whether TMDL process will work to achieve use
- mixed feelings about having EPA approve methodology in advance, but think overall review in advance is good because states can plan better
- watersheds cross political and administrative boundaries - at the boundary, water usage designations may change. The Supreme Court case (OK vs. AR) not withstanding - this issue is not resolved
- EPA should not require 303(d) listing as currently practiced where insufficient data exits
- methodology should remain province of the states - concern about interstate consistency
- electronic filing should be required
- states need a defined EPA approved methodology for assessment with local and regional differential, with a broad-based national guideline criteria before a list is developed
- collect hard data / analyze, compare - hard data is need to put on 303 list - on 305 list, without sufficient data, it should be identified with a monitoring schedule in place
- monitoring schedule should be developed with certain criteria to determine priority
- needs to be consistent from state to state
- should have public review of the data
- needs money to conduct required monitoring
- how are endangered species handled?
- need more scientific and unbiased sampling to support decisions
- very important for public and (debatably) EPA to review and comment on listing methodology in advance
- increase interstate consistency by requiring state authorities to develop a consensus methodology for assessing shared watersheds
- concept of integrated water quality monitoring and assessment listing categories of 5 should be adopted
- list of submitted impaired waters should be submitted every 4 to 5 years
- coordinate all CWA programs towards one focus making sure the guidance and rules in each program allow for that focus. Don't say we need to address TMDLs now but we also need representative 305(b) reports now. The two are often mutually exclusive
- guidance on listing decisions - how many samples are necessary, what type of data is necessary, how can we change our monitoring programs to better answer these questions
- 303(d) list should be impaired waters where implementation of a TMDL will fix the problem. This means that if we don't have a mechanism to figure out how we will reach the magic TMDL number, (i.e., permits) maybe a TMDL isn't the best way to accomplish this

Individual Notes - Session One - Second Question

- state assessment and listing methodologies should be posted for public comment and approved by EPA. These methodologies will directly determine which water bodies will receive TMDLs
- threatened waters, waters that are threatened by encroaching development and other land use changes, are the most important waters to include on the state 303(d) lists. In order for a

waterbed to violate it's water quality standards, a waterbed may be violating criteria designated uses, or anti-degradation requirements. A threatened waterbed is impaired because it is not meeting anti-degradation requirements and thus needs to be listed on the 303(d) list

- more uniformity in methodology between states should be implemented. Determining credibility of private data collection should be top priority and should be very rigorously upheld
- voluntary monitoring
- firmer rules/guidance on data acceptability by EPA. How should data without QAPPs be used? Should volunteer data (even with a generic QAPP in place for the voluntary monitoring program) be used for listing or just for additional support or to direct further monitoring by the state?
- often serious aquatic habitat concerns are not easily documented by traditional monitoring programs and don't make the list even though they are very important problems that should be under the preview of section 303(d)
- create a second "preliminary list" that can be used to focus attention on those waters where the impairment is not certain. This would prevent waters from getting "lost", but not force states to list water using limited, old data or those having uncertain QA / QC. Only those waters failing set methodologies (established methods, data quantity / quality, etc) would go on the 303(d) as needing a TMDL. ethodologies should be conceptually approved by EPA, but not formally "approved." Formal approval will cause EPA to be less flexible when reviewing each state's unique methodology. Methodologies should be publically developed and adopted as rules
- should embrace preliminary and action list
- need to recognize different level of science behind current and future 303(d) list and allow different delisting thresholds for each
- uniform standards, measurement as flow
- public outreach (adjacent landowners)
- pay for more data

Session Two

What problems associated with the current TMDL program should EPA address in a new TMDL regulation? Which are better addressed in other ways?

- states should be required to list only those waters that are actually impaired
- financial burden of TMDL program and allocations on small communities - forcing small communities to mechanical treatment plants - long process obtaining funding
- fairness of allocations to small sources in high background or high import or mis-classified streams (designated uses)
- low flow streams that are effluent dominated can result in disproportionately low effluent limits
- fairness of further regulation of point sources vs. nonpoint sources
- fairness of allocation process in watersheds where small discharges are dominated by one or two large sources in segment or upstream (both point and nonpoint sources)
- view of watershed problems should be holistic, representing all issues related to allocation and implementation

- fairness of onerous requirements on point sources when nonpoint sources remains unregulated
- day to day changes in water quality
- differentiating between urban and rural areas
- accurate source identification
- naturally occurring pollution vs. anthropogenic - used best available science
- cumulative effects
- states have trouble getting implementation accomplished with no enforcement ability
- want guidance rather than rule for implementation of nonpoint source controls - states not enforcing "unless compelling reason" - exercise CNMP for CAFO farms - need to integrate implementation of practices with listing process - make list user friendly
- just as difficult to have small scale industry address pollution issues as farmers - why should agriculture be treated differently than industry? - how to get implementation to people - ag- who have difficulty addressing pollution concerns - EPA should fund this - structure public participation processes - local stakeholder involvement
- arbitrary and inconsistent decisions
- anti-degradation policy should be separate, especially Tier 3 water bodies that have declined in water quality but are attaining water quality standards
- lack of implementation! There needs to be schedules for actions. Also, don't let these lazy state agencies get away with calling a wasteload allocation a true TMDL - that's plain deceit - designed to mislead people into thinking they are doing their job
- conundrum of expanding population and expanding demand for loads in a natural environment with shrinking availability or supply of available loads is causing a lot of those problems. Is there a market-driven solution we can implement rather than additional regulation? Read "Tragedy of the Commons" again. Trading of pollutant loads is just the tip of this issue. How about a hurdle in the permitting process for a determination of "public necessity and utility" for new and expanded permits?
- need to really discuss/decide which pollutants may not be best addressed by TMDL program
- source water assessment protocol consistency between political boundaries. Probably should be done on watershed basis
- implementation plans should not be part of TMDL
- impairment sources are not obvious
- implementation plan may take longer than planned
- managers are unwilling to commit to a plan when they don't have a model which has worked in the past
- state staff does not have personnel to address TMDLs and implementation plans should be phased into process
- raw score approach - need to address criteria on magnitude and frequency
- need more routine monitoring by local sources who can explain the data
- statistical approach sampling advantageous
- site specific data critical for evaluation listing
- accurate data gathered/used (validity)
- avoid use of probabilistic approach to put waters on 303(d) list

- the use of statistical approaches can be applied to allow states to better assess whether their standards are being met. As more data rich sites are available, approaches such as the "bionominal" can be used. The bionominal uses a hit / miss concept to decide if each individual sample does or does not exceed a water quality criterion. Even more data rich sites can be assessed for the magnitude of the exceedance (the bionominal approach does not do this). Once the statistical is selected, states can select confidence levels. The confidence levels can vary (to be less restrictive = more inclusive for a preliminary list, and set higher for action 303(d) lists)
- no threatened waters required to be listed
- approval of methodology by EPA is needed to keep the region consistent
- a deadline for EPA to approve the methodology - 30 days would also be helpful
- provide money to do it!
- streams listed in past for no good reason - methods to follow to delist. States that develop methods should be allowed to use them

Individual Notes - Session Two - First Question

- accurate source identification
- consider and integrate listing process with implementation of pollution controls
- how to identify source and treatment - based on changes in water quality or land management practices
- moving the implementation plan out of 303(d) and into existing clean water programs, e.g., 106, 319, SRF, etc. is essential
- threatened waters need to be moved to 303(d) - reasonable assurance needs to be gingerly addressed
- implementation plans need to be required in the 2000 rule that include monitoring activities that ensure that both nonpoint sources and point sources reductions are actually taking place
- critical flow should be the flow at which exceedances are observed. Some pollutants are higher in larger flows (run-off events)
- TMDLs for ephemeral streams - short-lived flows must meet water quality standards?
- variable from day to day
- determine actual source of nonpoint sources for identification
- take into consideration naturally occurring things in the environment
- Clean Water Act - how does it apply to nonpoint sources?
- separate step for TMDL rate determination
- TMDL should just be the assimilative capacity with aggregate allocation of nonpoint sources and specific allocation to point sources
- implementation plan should be second step
- need to allocate reductions to nonpoint sources but acknowledge they are different and may take longer
- with regard to nonpoint source pollution, "does the EPA have authority to implement rule?" with this in mind, perhaps guidance is more appropriate than rules and regulations
- implementation is a task difficult to assimilate because of tight resources and inadequate data

- TMDL should not be used to address all water quality problems - NPDES permits can effectively be used to address water quality problems. So pursue this rather than TMDL development
- TMDLs for nonpoint sources should use a watershed approach
- nonpoint source impairment should use BAT to restore impairment (voluntary not mandatary)
- local involvement in decision-making. Perhaps by watershed or region
- must recognize that water quality improvements that might result from TMDL implementation will take years in most cases. There may be cases where EPA must provide states the flexibility to amend water quality standards (downward if necessary) where BMPs / TMDLs can only go so far

What are the pros and cons of the 2000 rule?

- liked explicit criteria applicable to Listing Methodology, QA / QC requirements and Public Review
- liked 4-part list and public review
- didn't go far enough in making cut to 303(d) list
- too short time frames for effects
- permit freeze for new and expanded permits to growing cities
- off-set requirements are either unavailable or unenforceable
- concern about timetable of rule. 2000 rule costs money to implement. Disagreement: EPA does not have legal authority to set rules - need clear, consistent rules that are similar across states - not influenced by politics
- what can be done up front to prevent pollution - e.g. 319 - what else can be done? Issue of CAFO where poultry are regulated but free range cattle are not (not regulating areas where manure is applied) - pollutant and pollution distinction is good
- con - no listing methodology
- con - causing confusion and litigation
- con - does not address air deposition properly
- con - only new data causes delisting. What about incorrect listings?
- pro - puts more authority into requiring actions to be taken, particularly in the area of nonsource pollution
- con - threatened waters not listed. We need a mechanism to monitor status so we can prevent impairment
- pro - waters staying on list until WQS attainment
- con - prefer 2 year cycle for point source impaired waters but can live with 4 year cycle on nonpoint source listing
- rule 2000 does not provide clear guidance concerning implementation plans
- does not require identification of pollutants or source of pollutant (i.e., bio-accumulation / impairment of Mississippi River)
- listing guidance - available next week - states allowed to choose whether to use the guidance
- should implementation plan be part of TMDL?
- con - national consistency for making data available

- con - general guides established nationally - site specific methodology listing by states
- con - differentiate between what are regulations vs. guidance
- implementation plans in the TMDLs are very bad!! Especially for nonpoint source issues
- con - required that stream meet all standards to remove from list, even when listed for violating only one standard / one cause

Individual Notes - Session Two - Second Question

- threatened waters for preventative monitoring and tracking
- distinction between pollution and pollutant is good
- science for tracking nonpoint sources is changing rapidly
- monitoring and listing should be on-going based on those developments
- 4 part list problem
- implementation plan in 303(d)
- EPA approvals of individual TMDLs
- pro - requires implementation plans that are approved by EPA and subject to public comment. Many state and agriculture representatives claim that an implementation plan should be considered outside of the TMDL process, however, this is what the state has been doing under the current rule and **it isn't working!!** If implementation plans are not required by the new rule, these TMDLs will continue to be paper exercises that **DO NOTHING** to improve water quality
- prioritizing based on "presence of" T and E species - "presence of" is not specific enough...what if a bird species is just passing through?
- threatened waters should not be in the 303(b) list, but should be tracked on the 305 list
- time factor compared to point source should be re-evaluated
- water for human consumption should be # 1 priority
- keep states in charge of environment as much as possible
- some pollutants require other intervention (mercury)
- con - TMDL should just be the assimilative capacity with aggregate allocation nonpoint sources and specific allocation to point sources
- con - implementation plan should be second step
- con - need to allocate reductions of nonpoint source but acknowledge they are different and may take longer
- implementation plans must address sources; pollutant must be defined specifically; interstate issues need better definition and handling - especially large watersheds
- TMDL's based solely on biological data are difficult to implement
- unrealistic timing for TMDLs
- draft rule should focus on the major cause of impairment - not the minor stresses
- pro - 305b / 303d can be focused together
- states should be allowed to focus on priority watersheds, not all watersheds
- some definitions need to be set. What is a nonpoint source TMDL? What exactly is a nonpoint source?
- pro - exclusion of "threatened" waters from list

- pro - extended listing period to 4 years - 5 years even better
- pro - amended draft rule to exclude forestry nonpoint sources from being reclassified as a point source - it is critical to retain forestry as a nonpoint source
- regional inconsistency in interpretation

What should EPA do to overcome problems in the 2000 rule?

- establish procedures whereby NPDES permits can be issued prior to TMDLs
- balance and prioritize clean-up of nonpoint sources
- consider new category for threatened waters - target for data collection (non 303d) for teaching
- force states to automatically adopt water effects ratio (WER) in TMDLs and delist if necessary
- provide rationale for each waterbed listing and delisting
- now that listening sessions have been perfected, use them often - they are valuable sources of input
- provide guidelines to avoid misuse of best professional judgement - this is the root of the problem
- the rule should recognize that one TMDL can affect others
- promote adaptive and iterative management
- change the regulations so EPA has authority to approve listing methodology
- explain how not taking the 2000 rule actions could result in a loss of income from other sources and cost even more to clean up later if actions aren't taken in the near term
- water bodies covered by section 316(a) variance should not be included in section 303(d) lists
- approve methodology - this would enable there to be more consistency across state lines in watersheds, or just use Oklahoma's USAP and don't wipe out what we've worked so hard to achieve with USAP just to make it easier to delist!!!
- address nonpoint sources first before imposing additional requirements on point sources
- bring nonpoint source discharges up to the appropriate "secondary treatment" technology standard before forcing point sources to implement AST or Tertiary treatment
- if legislative solution is needed, then write an Administration Bill and get it submitted; also increase Appropriations and Budgets to address inequities in costs to small discharge
- put together a non-governmental, consensus-building committee using non-affiliated technical / scientific organizations to set and adopt consensus standards for the entire WQ management process - beneficial use determinations, WQ standard applicability, UAA, monitoring, data review and acceptance, modeling, TMDL development, load trading, market incentives, etc
- act as facilitator, mediator and discriminator of information between political entities, i.e., states
- reasonable delisting process to alleviate taxed resources that could be utilized for truly impaired waters
- if approved standards and methodology should not also have second guessing on approval of lists
- guidance for use of nonpoint source problems in TMDL. Authority to enforce implementation plans require changes in agriculture activities if this is the principal source of stream impairment
- only require states to get conceptual (consistent with CWA) of listing / delisting methodologies.

Only submit again when modified. EPA should only develop methodologies for states without a publicly developed, formally adopted method

- let the engineers and scientists write it and get rid of the lawyers
- look at 1 year lists to take advantage of the rotating basin plans in the states
- removal of the 20% cap for monitoring in 319 is needed if states are going to propose monitoring schedules in the new rules
- list and delist should both be each pollutant specific
- need guidance at least 1 year in advance of list due date
- need to have all EPA regions agree on interpretation

Individual Notes - Session Two - Third Question

- threatened waters should be listed for monitoring and preventative practices
- methodologies should have consistency across states - watersheds similar to CAFO rules, P index
- coordinate collection of data from various organizations - governmental, citizens groups, research
- you are doing it - listening sessions, meetings with states and locals - proposed changes sound good so far
- implementation plans need to be required in the new rule and monitoring to gauge success of the voluntary (and regulatory) measures that are taken
- give drinking water (human consumption) #1 priority - priority by designated use
- consider natural renewal of streams and economic impact of cleaning water
- cost of implementation
- consider alternative methods of solving problems - also variable time requirements
- should address air deposition differently, need linkage with air program
- should be “off ramps” on TMDL highway
- side question: how do legacy pollutants fit into integrated report? - need to address groundwater / surface water interactions
- new data (after TMDL developed) needs ways for incorporating into existing TMDL
- phased TMDLs encouraged because implementation plans are continuous. Implementation plans can’t be set for some impaired waters because data isn’t adequate for delisting. Should be subject to public and EPA review. States need the oversight. Implementation plans should be separate. TMDL-driven source permits changed on permit cycle. Implementation plans need to incorporate nonpoint source issues
- review NAS TMDL study and incorporate
- need listing and delisting procedure between official listings
- rule implementation should utilize state programs in place
- engage the public with dispute resolution, dispute prevention and continued facilitated discussions on relevant, local watershed issues
- work in collaboration and cooperation with landowners, industry and other stakeholders and emphasize education and prevention ahead of or at least equal in importance to restoration. I

am convinced that prevention of water quality problems is the key and that the vast majority of landowners and industry folks will respond positively to education and incentives more so than the threat of litigation / regulation. Streamline the delisting process. In lieu of states using current lists and going through the onerous delisting process for each stream, give states the option to start over - to develop a new list that categorizes all water bodies using supporting data where available and a "sending" list where it isn't. Assure consistency in implementation of rule across EPA regions

- integrated 303(d) and 305(b) - good idea but, needs to be on a longer than 2 year cycle - 5 years would be desirable to match up with basin rotation cycle and 5 yr NPDES length

Session Three

What should be the scope of the listing process, and why? (e.g. only include impaired waters? Integrate the list of impaired waters with the full characterization as required under 305(b)? Include or exclude threatened waters?)

- exclude threatened waters from the 303(d) listing. On the 303(d) list, solely to secure EPA grant monies. If there is no credible data to keep these waters on the list, they should be allowed to be removed
- it is good to integrate the 2 lists, as long as existing content of lists does not change
- "threatened" - being proactive is important; need better definitions; no consensus on whether it should be on or off "303d"; maybe new category is needed
- 319(h) guidance should be flexible enough to allow funding for "threatened" streams as part of 303(d) requirement, even if the threatened streams are removed for the "303(d) list" and listed elsewhere. Perhaps we need to modify the funding apparatus for those streams - be very careful of the requests to allow different segments of water body to be combined in sampling routines / schemes. In many cases, different segments may need to be considered separately or the data is meaningless or less relevant
- generally like guidance
- concern about how guidance will apply to current lists - guidance vs. existing rules for delisting - not enough data - doesn't adequately fit into one of those categories offered under guidance
- under new structure - we would like to wipe slate clean - or at least those without appropriate data
- high profile streams - get phase I monitoring
- concern re: source issue mixing 303(d) vs. 305(b)
- like combining lists and assessments from a work standpoint - since 303(d)
- agriculture is a catchall source - because of predominant land use
- agriculture has concern re: being blamed for point source and nonpoint source run-off for nutrients from urban
- need refinement of agricultural category
- "threatened" should be included - should be an indicator of fragility of watershed in 305(b) as threatened
- threatened should not be included because we have a hard enough time figuring out what is

impaired

- easier access and easier language
- 303(d) should be only waters impaired by pollutants and requires TMDL
- threatened water bodies should not be on 303(d) list; no TMDL
- waters impaired by pollution should not be on 303(d) list; no TMDL
- pollutant must be known to put the water on 303(d) list because identifying the pollutant may take a long time and the TMDL time frame is triggered by putting the water on the 303(d) list; example: water listed strictly based on biological indicators may not be able to find pollutant quickly
- favor integrated approach of five groups of classification into one report - 1) waters impaired by pollutants, 2) waters impaired by pollution, 3) waters with approved TMDLs, 4) water with insufficient data, 5) water expected to meet WQS without TMDL - not good if time is not lengthened to 2 years
- threatened waters should not go on 303(d) list. Should go on 305(b)
- integrated report will require more time; especially if public comment is part of the process
- 305(b) list cycle in CWA - need to work around 2 yr cycle
- threatened waters should not be listed on 303(d) list. Listed elsewhere. On 305(b) list
- need credible data which in turn requires more resources. States don't have financial resources. U.S. tax payer needs to provide the resources
- 303(d) list should be limited to waters that have sufficient scientific data to show impairment. Other waters should be on 305(b) list until resources are available to monitor and sufficient data available to move to 303(d) list if found impaired or meet standards and come off the list
- water bodies not listed on 303(d) list until data shows impaired - due to specific pollutant or pollutants
- states should not be required to list as impaired solely or primarily by nonpoint source or air deposition
- need to use monitoring to prioritize water bodies. Need use of voluntary trained qualified state sanctioned persons to assist states in their monitoring efforts
- threatened waters to be designated for proactive assistance due to changes in land use practice or issues of concern. Understand that 319 funds can go to protect water bodies against becoming imparied
- what is the strict definition of threatened - no clear cut definition - disagreement: threatened is too broad - this term should be removed. Anti-degradation policy allows states to take into account trend toward degradation - have threatened address anti-degradation
- we need more guidelines on what constitutes threatened waters
- what features of the water determines threat
- we have strong feeling that we shouldn't backtrack from the threatened waters. Don't abandon current rules
- why don't we sample every month
- they have found money for bio-terrorism; need to find money for monitoring
- need to retain threatened waters on the list
- education is important

- only include impaired waters needing TMDL on 303(d), but make all waters delisted for lack of information the top monitoring priority, particularly if it's of priority for protection
- 303(d) should be reserved for TMDL priorities; it's more important to accurately describe
- we need to be careful to distinguish the impaired list from the other categories. The integrated list will be much larger. Do we have the time to create a larger list with more categories. Don't put threatened waters on 303(d). Put on 305(b) only. Problem: public review of a much larger list takes a lot of work. If we can't get around the 305(b) 2 year listing cycle, perhaps the integrated part could be done less frequently
- threatened waters should be included on the 303(d) list. Placing them on the 305(b) list allows them to sit with no action. Threatened waters are as important as impaired and should be acted on early before they become impaired
- only impaired in category V
- needs to be a better definition between category 5 and category 4 waters; specifically which waters will benefit from a TMDL - (cat. 5) vs. which waters will benefit from implementation without a TMDL being necessary (cat. 4). Not just pollutant vs. pollution, but pollutants where implementation efforts are going to be possible without a TMDL. Perhaps even preferred over a TMDL. Succssful load reduction will likely require as much implementation as is possible. The TMDLs currently being developed do not adequately provide the information necessary to do this. This information can be obtained from watershed reconnaissance, land use data, local agencies, and water quality monitoring data. Yes, this information does go into a TMDL, but the further steps of loading calculation really become unnecessary. We can't afford to monitor to assess the true load nor can we monitor to assess whether we are actually meeting the TMDL. Why not focus efforts in places where we put practices on the ground to reduce the problem, rather than spending time and resources on coming up with a magic number we can't implement. Obviously this won't work in some places - such as where point source or other permitted discharges are a significant portion of the load. But in cases such as watersheds impaired by nonpoint source sediment loading, even nonpoint source nutrient loading, successful implementation will likely proceed without the TMDLs currently being developed. These implementation plans will consider things like habitat data and biological data that are not currently included in most TMDLs. This information, coupled with other information that doesn't "fit" into the model, along with the standard chemical and land use data, will be used to develop a targeted implementation plan - regardless of the existence of a TMDL - the magic number. The implementation won't refer back to that number. We don't know how many riparian areas or grassed waterways are necessary to achieve a 30% reduction in sediment loading - we just know that we need to find the areas of significant sediment loading in the watershed and address them
- should not have a threatened water list
- take care and work on impaired waters first
- we like the integrated list and also like the categories that can be used
- 303(d) list should only include waters impaired by pollutants
- threatened waters should not be included on the 303(d) list, because they are not impaired, but should remain on a monitoring list

- 319 funding should not be dependent on having a completed TMDL - which would require being on the 303(d) list unnecessarily and put unnecessary constraints on 319 funding
- waters impaired by diversion of water for beneficial use should not be on the 303(d) list
- only impaired waters should be listed
- "threatened" waters should not be listed
- waters meeting standards should not be listed on the 303(d) list through an anti-degradation policies
- waters should be listed only if impaired by a specific pollutant - classes of pollutants should not be included, pollution should not be included
- impairments of narratives should not be included unless measured with an objective translator mechanism adopted in the state rules
- listing should not be based on fish consumption advisories
- some impairments are not susceptible of being solved through TMDLs. In these cases, TMDLs should not be required, and the waters should not be listed: waters impaired primarily by nonpoint sources or air deposition, waters impaired for whole effluent toxicity, ephemeral and intermittent or effluent dependent streams and situations where a TMDL is not likely to lead to attainment
- water bodies with 316(a) variance should not be included on the 303(d) list. States should consider natural thermal loadings in determining whether an impairment exists. Thermal impairment should be determined under the 316(a) framework
- integration of list is a positive step only if the purpose of each of the 303/305 focus is maintained
- trend information for all waters would be beneficial - use in prioritization
- only impaired waters should be on 303(d) list
- "threatened" waters should not be on it
- "threatened" needs to be defined - consistently between 303(d) and 305(b) list
- need funding source for impaired waterbodies and threatened water
- 303(d) should include only impaired waters, excluding threatened waters
- integrate the list and have one definition of "threatened"
- funding needs to be changed!
- only impaired waters!
- threatened? - no. Define threatened and time frame. 303(d) and 305(b) definitions need to be the same
- if 303(d) and 305(b) are integrated, issues will be handled the same - need a separate category for threatened - 5 for impaired, 6 for threatened?
- 319 and other funding needs to go to both impaired and threatened waters
- a beneficial use analysis should obviate the need to sample for all causes, when the stream community is ok
- exclude threatened waters
- only list waters that need a TMDL; that have good data; and it makes sense to do a TMDL
- states need flexibility to focus 319 funds
- states should be able to integrate 303(d) and 305(b) reports if they so choose

- threatened waters should not be included in the 303(d) but in a planning list for 305(b) report
- states should not be required to list waterbodies impaired solely or primarily by nonpoint sources or air deposition. Nonpoint sources should be handled by 208 or 319
- we believe the lists should be integrated for better efficiency, and threatened waters should be included. However, such listing should not automatically mean a TMDL is developed - it should be a separate section that calls for more monitoring to establish the true condition of the waterbody as to whether it's actually impaired
- need clear characterization for threatened waters that includes land use assessments - include either as a component of 303(d) list or as part of 305(b) list. Recommend a new category within 305(b) categories - e.g., attaining standards but data indicates water quality trends are degrading
- criteria for threatened should include: water quality monitoring
- shows trends toward degradation - land use practices pose a degradation threat - access to resources to monitor and provide technical and economic assistance to address issues (in areas with limited resources, risks increase that degradation will continue without abatement)
- create a TMDL program consistent with section 303(d)(1), and use 303(d)(3), 303(e), 305(b) and 319 to address other water quality issues
- states should be required to list only those waters that are actually impaired. Threatened waters should not be on 303(d) list. Also, only list waters and TMDLs where established that the impairment is due to specific pollutant(s)
- states should not be required to list waterbodies impaired solely or primarily nonpoint sources. Also, where there is insufficient data to determine impairment. Also, waters for which a TMDL has not been developed nor waters expected to meet standards within a reasonable amount of time
- create a focused TMDL program consistent with section 303(d) only
- create an integrated section 305(b) and section 303(d) lists, but TMDL follow section 303(d)
- states should not be required to list waters for which a TMDL has been developed
- states should set up a 5 year program to review 305(b) listed water without adequate data
- credible data should only be used to list on 303(d). Threaten should not be included on the list. Only impaired with credible data should be on the list
- impaired waters only
- sound science supporting impairment designation
- exclude "threatened" waters, to ambiguous / speculative
- limited resources should be designated for demonstrated impaired waters, not potentially threatened

Individual Notes - Session Three - First Question

- threatened waters and category 4 waters should not be on 303(d) list, BUT they have to be on some list that requires extra monitoring and allows for extra levels of implementation.
- there is a huge public relations problem here. Most people feel that any water not on the 303(d) list is being dropped from the area of concern by government
- funding for outreach education must increase dramatically

- only waters that are impaired should be listed
- list all waters but categorize as described - 303(d) only - WQs impaired
- don't list threatened waters as impaired
- how does anti-degradation fit in here?
- don't list threatened waters, but prioritize for monitoring
- exclude threatened waters
- use of now integrated list recommendation - divide "class 3" into 2 parts, 1) those which the small amount of data indicates attainment with WQ standards and 2) those for which the small amount of data indicates not in compliance with WQ standards
- only those waters that are impaired (not to include threatened waters) and have a pollutant identified as causing the impairment and are appropriate for TMDL development
- a preliminary list can contain threatened waters, waters impaired due to pollution (but for which a pollutant has not been identified), or those waters that are impaired but a TMDL is not appropriate
- be as consistent as possible, including public participation at all levels. A comprehensive approach seems most advantageous
- need a better grass roots ability to do sampling and pay for the analysis - for monitoring - identify sources - or potential polluters
- listing without identifying pollutant - 1) starts clock (10 years in 2000 rule) for state to complete TMDL. Under rotating basin approach, could be 5 years until you come back to this water to identify pollutant, 2) do you prohibit or severely restrict permitting for ALL discharges since you don't know which pollutant is impairing the designated use? Identified impaired, but pollutant not yet identified
- should only be those waters impaired by pollutants and need a TMDL (cat. 5 of integrated report)
- but TMDL may not be appropriate approach for all pollutants - may need to expand cat. 4
- shouldn't include threatened waters (not even as an option) - can't predict accurately (don't extrapolate data)
- support for CALM guidance to provide minimum thresholds for what is impairment
- only include impaired waters
- prioritize or "triage" according to necessity of beneficial use
- only include waters that have sufficient data
- threatened waters should be on 305(b) list
- waterbodies with a completed TMDL and is in the process of being implemented, should be on 305(b) rather than 303(d). However, it should be an active vs. passive list, with regular review to assure achievement of water quality goals
- do not include threatened waters on 303(d)
- a separate list of waters on the 305(b) report could be used
- "threatened" is a poor choice of terms - it is undefined and difficult to put a uniform definition in place
- threatened waters need more monitoring to determine the problem or eliminate them from the list

What should happen to waters with insufficient information to make a credible determination, and why? (e.g. use of both a preliminary list and an action list?)

- waters with "no data" or no credible data should be excluded from the 303(d) list. Oklahoma has in the past included waters as impaired. On the 303(d) list solely to secure EPA grant monies. If there is not credible data to keep these waters on the list, they should be allowed to be removed
- it is good to integrate the 2 lists, as long as existing content of lists does not change
- "threatened" - being proactive is important; need better definitions; no consensus on whether it should be on or off "303(d)"; maybe new category is needed
- first choice come off the list
- go into the 305(b) assessment for insufficient data
- concern whether streams with no credible data (that are listed) should have priority over streams that have not been monitored at all
- category 3 - insufficient data - should have 2 sub-lists: 1) no data 2) insufficient data
- 5 categories fit well, but it needs to be flushed out and defined what goes into each category
- public has to be aware that just because a water is not in category 5, that it will still be monitored and tracked
- people are not interested unless they have a stake and won't be interested enough to participate and educate themselves. Homeowner associations, farm bureau, conservation commissions, developers - inform through local groups. Phased public involvement - local groups, regional areas and statewide
- not sufficient resources in state government to increase public outreach
- decouple 319 funding requirements from TMDL because moving waters from 303(d) list and therefore no TMDL - can not get 319 funding
- preliminary list should be required for waters having insufficient or inadequate data. For those waters having data which suggests that the waters may be impaired, but the data is inadequate; a preliminary action list is appropriate
- waterbodies not listed on 303(d) list until data shows impaired due to specific pollutant or pollutants
- states should not be required to list as impaired solely or primarily by nonpoint source or air deposition
- need to use monitoring to prioritize waterbodies
- need use of voluntary trained qualified state sanctioned persons to assist states in their monitoring efforts
- must follow good quality assurance and quality control
- why hasn't data been collected - this was an important point for stressing the need to utilize existing infrastructure for monitoring and sampling
- need to recognize that things change and conduct long-term activities
- need specific data to remove
- supports "must use" for all existing data
- example from EPA: contract labs did bad work - need to re-examine information

- could there be a distinction between professional and non-professional data? - relates to volunteer vs. state, local and federally obtained data
- these need to be the top priority for monitoring, particularly if they were originally listed on 303(d)
- we support these lists for prioritization purpose
- keep in mind the 305(b) is an assessment which requires a socio-economic cost analysis, environmental impact, extent of nonpoint sources, analysis of fishable-swimable achievability, etc
- leave them on the 303(d) if already there. Something caused them to be placed on the 303(d) at some time. Let's make sure there is no pollution problem before we remove them from the list. Otherwise they may be removed and if a problem does exist, the problem may worsen before it's finally placed on the 303(d), making it even more difficult to solve the quality problems
- the idea of a preliminary and action list is an excellent one - use professional judgement to allocate resources to get the most bang for buck to most effectively address the insufficient information?
- overall - the intentions of the integrated list and report are wonderful. However, given the limitations of our current monitoring and reports - EPA needs to be careful in interpreting the results of the integrated list our waters are going to appear to be in worse shape than they are because of limitations in the focus of our monitoring (towards impaired) and current available data. Successful load reduction will likely require as much implementation as is possible. The TMDLs currently being developed do not adequately provide the information necessary to do this. This information can be obtained from watershed reconnaissance, land use data, local agencies, and water quality monitoring data. Yes, this information does go into a TMDL, but the further steps of loading calculation really become unnecessary. We can't afford to monitor to assess the true load nor can we monitor to assess whether we are actually meeting the TMDL. Why not focus efforts in places where we put practices on the ground to reduce the problem, rather than spending time and resources on coming up with a magic number we can't implement. Obviously this won't work in some places - such as where point source or other permitted discharges are a significant portion of the load. But in cases such as watersheds impaired by nonpoint source sediment loading, even nonpoint source nutrient loading, successful implementation will likely proceed without the TMDLs currently being developed. These implementation plans will consider things like habitat data and biological data that are not currently included in most TMDLs. This information, coupled with other information that doesn't "fit" into the model, along with the standard chemical and land use data, will be used to develop a targeted implementation plan - regardless of the existence of a TMDL - the magic number. The implementation won't refer back to that number. We don't know how many riparian areas or grassed waterways are necessary to achieve a 30% reduction of sediment loading - we just know that we need to find the areas of significant sediment loading in the watershed and address them
- should be unlisted until sufficient information is reported
- monitor only impaired water bodies first

- remove streams and waterways that are not impaired
- the 5 category 305(b) list is excellent tracking list, and the category of "insufficient data" is where these waters should go
- states should be encouraged to collect data for the "insufficient" waterbodies, so that waterbodies do not remain in this category for more than, say 5 yrs, long enough to have been monitored in the rotating basin scheme
- insufficient data has to be mitigated by collecting monitoring data, not modeling or predictive information
- waters with insufficient data should not be included on the 303(d) list
- states should be encouraged to develop the data necessary to make an impairment decision
- waters with insufficient data should be removed from the 303(d) list without going through the delisting process, i.e. waters that should not have been put on the list in the first place should not have to wait for additional monitoring before they can be taken off the list. The fact that there is insufficient data to support the listing should be considered "just cause" for removal from the list
- waters with no data should not be considered dirty or needing sample data, and should not be in any category
- waters with a little bit of bad data should be in a category 3 needing more data
- insufficient - should be in a separate listing
- there should be a separate list, with plan to monitor or otherwise evaluate
- but, if you must monitor all these, the costs and manpower balloon, and there is not enough to go around
- if you know little / nothing about a stream, it should to in category 1; not category 3
- if you have a little data, but it is not good - need monitoring sooner
- get on planning list for future monitoring
- waters should be assumed to be ok unless there is data to the contrary
- should not be put in 303(d) list
- should be put on a preliminary list for more monitoring
- priority to monitoring by basin should be used by states with limited money
- there must be a solid timeline of no more than 4 years for additional monitoring for anything on an "action" list
- provide money and assistance to citizens and municipal groups to conduct assessments following quality control procedures
- develop methodology to collect data from range of organizations and centralize use of data within a public participation process
- they should not be listed unless credible data has been established. A monitoring schedule should be established. Science must be used. No estimation or "guesses". Nonpoint sources should not be the only reason a body of water is listed
- need qualified state sanctioned volunteers to assist the state in their monitoring efforts
- if waterbodies meet standards, states should not be required to list them based on a state anti-degradation policy
- states should not be required to list waters impaired solely or primarily by nonpoint sources or air deposition - other programs and statutes appropriately address such waters

- water listed without credible data should be delisted until credible data and sufficient monitoring is done to merit listing
- states should be allowed to allocate resources to prioritize impaired waters. Without credible data listing would be presumptive - no money to waste!

Individual Notes - Session Three - Second Question

- there should be increased monitoring required for waters with insufficient information and a timetable for making a decision
- need 2 lists with insufficient data - 1) waters where no data indicate any problem and 2) waters where limited data indicate potential problems
- waters with insufficient information to make credible determination should be listed in category 3 (insufficient or no data). Those with insufficient data that are now on 303(d) list should be removed and placed in category 3 with priority for data collection
- use of both a preliminary list and an action list is a good idea
- multiple informational meetings are also key
- should not be on 303(d) list; there should be a listing of planned monitoring activities
- states should make transparent the process for preparing action lists, including any specific thresholds for data quality / quantity and QA. States should also make available the data used (or not used) in the listing process
- should not force states to list waters based on a single exceedance of a "toxic" substance. Consider using statistical assessment here, too
- EPA must allow states to reconsider existing 303(d) listed waters to determine if they have sufficient and appropriate data to support the listing. If the data are not adequate, states should be allowed to move to a preliminary list for further (timely / mandatory) evaluation
- there should be only a minimal number of streams or watersheds that are exempt from the approach. Lack of data is not a reason to exclude listing, particularly as a threatened or preliminary status
- they still need data - over long term - verifiable vs. screening - refers to quality of data and the frequency of sampling
- 3a. little data indicates compliance; 3b. little data indicates noncompliance (planning list)
- EPA and states need to adequately convey the message that waters on the planning list will not be forgotten and additional data will be collected. Need more stakeholder meetings, specifically to explain the history and current state of the listing process
- get local people involved in water quality monitoring - landowners and public interest - so that they are a part of the process. Hold public meetings in the affected watersheds - well publicized and at start of the process - Phase I of rotating basin approach. Need money for outreach
- should be in category 3, and use preliminary list
- should require quantitative data before listing in category 5
- should have expectation that waters on preliminary list will be monitored but need to allow flexibility when and allow BPJ to prioritize - ** need to make sure to <u>not</u> require monitoring in all segments and instead focus on waterbody - category 1 could be very short if <u>need</u> data for all uses / criteria

- ephemeral streams - also need
- default them to a planning list / prioritization based on what information that does exist and use a tiered approach based on necessity of beneficial use
- these waters should be listed on 305(b) list with a flag that additional information is being collected to enable the state to determine if a TMDL is needed. Again, this should be an active list and not waters sent to a dumping ground (list)
- put them on a list needing additional monitoring

Session Four

How frequently should the list of impaired waters be submitted, and why?

- 5 years fits with NPDES permitting and rotating basin approach and 319 assessment
- staff time not sufficient to do reports more frequently
- Clean Water Act requires every 2 years for 305 list; so that has to be done regardless of how often 303(d) is submitted - amend CWA to submit 305 list every 5 years
- if CWA is not amended, 303(d) should be every 4 years to fit into every other 305(b)
- mid-cycle delisting is important because longer listing cycle is disadvantage if court ordered TMDL for segments that have been shown not to need them and delisting between is not allowed
- list process should be done every 2 years because if data is collected that shows a stream is impaired and then it takes several years to get listed and then several years to get a TMDL - could be many years before anything happens
- public participation process should be part of mid-cycle amendments to the 303(d) list
- public should be involved earlier in the process than at the amendments - in the development of the list
- risk assessment for 303(d) listed segments may be required in the future
- 4 or 5 years as a requirement - optional interim updates to allow time for public participation and environmental reports, to coincide with permitting cycles, monitoring cycles, to allow adequate time for data collection and assessment and it's reasonable
- strongly believe that integrated list should be prepared every 2 years because state agencies use these lists as a working tool for planning, public education, etc. It is important to keep these lists as up-to-date as possible. Interim updates could b problematic if the public participation process is not clear
- should be 5 years. Should go through extensive public participation process throughout and should have flexibility to do annual updates like the current 305(b) report. Also, need time to collect information for the report. Keeps it consistent with permitting process
- had some support for 4 years
- not 2 years (reworking lists frequently isn't as important as making progress in WQ improvement)
- like idea of having a longer required period, but allowing states to do updates as needed more often
- need to keep some coordinated schedule between 303(d) and 305(b)

- table favors 5 year listing cycle to match NPDES permit cycles, rotational basin monitoring schedules, etc. - interim updates could be provided every 2 years (via email) if the states choose to or need to; this interim update could serve as EPA's statutory required 2 year report from the states on water quality - *more lengthy cycle also allows more time for public involvement in process
- listing should be every 5 years to correspond to NPDES permitting cycle, rotating basin monitoring approaches, 319 assessments
- amend Clean Water Act to make the 305(b) report due every 5 years
- if Clean Water Act is not amended, a 4 year cycle is more appropriate so that the 305(b) list can be integrated with 303(d) list every other submittal
- mid-cycle amendment to the 303(d) list - listing and delisting - is critical in the 4 or 5 year cycle
- 5 years with interim changes encouraged, as more information is known on each stream - in sync with 5 year permits
- 4 years to sync with 305(b) 2 year cycles
- 5 years with flexibility for annual update - linkage to permitting process - doesn't sync with 305(b) reporting
- 5 years with ability to update annually
- listing should occur no less than every 5 years as long as there are interim listing and delisting available
- 5 years - it takes time to develop credible lists - NPDES permits are also on a 5 year cycle - gives more time for states, public, and EPA to develop a mutually acceptable report
- need provision to list and delist waters in the interim of 5 year cycle
- if watersheds are on a 5-year rotating basis - listing / delisting decisions could be made at that time
- some of the lists will be based on 4 -5 year old data
- Florida is doing basin-specific 303(d) lists
- 5 years sounds reasonable, but it would have to be more strictly adhered to than the current 2 year schedule because you are dealing with OLDER data. The longer it's dragged out, the less relevant it is. Maybe have flexibility on the unchangeable 2-year 305(b) schedule. Good point made by table 7 that the states' 5 year (rotary basin) and NPDES permit schedules may not be fully implemented anyway, so is this going to help or hurt (having a 5 year 303(d) schedule)?
- 5 years - rotating basin monitoring based on 5 year schedule - permits based on 5 year issuance / expiration
- using 2 years more or less forces states to initiate the development of one list immediately following approval of one list
- do you see any difference in 2 years?
- it should be every 5 years so that full public involvement and the process should be transparent and understandable, and should provide adequate opportunities for public participation, review and comment
- state should have more latitude to update. Currently too short of time. Too much time and effort. 5 years would be better for total document
- continue with 2 year submissions. Extended to 4 or 5 years would be too long a wait for a new

waterway to be listed. If investigation started in, for example, the 2nd year of a listing and was completed just after a new list was submitted, it would be another 4 or 5 years before that impaired water could be added to the list. If the primary polluter chose not to do anything, they wouldn't have to until the next listing, particularly if a nonsource issue

- 5 years to allow for integration of 303 / 305, watershed planning, monitoring efforts and to be able to show improvement in water conditions - interim updates necessary for delisting
- critical to have clear criteria for determining whether waters are threatened or impaired
- if methodologies are clear-cut, then the administrative confusion surrounding the process would be decreased
- need frequent methods for updating report
- important to update as data becomes available in order to give the public opportunity to scrutinize the listing / delisting
- keep list accurate - lists should be submitted to EPA for approval every 2 years. Key component is good methodology
- at least yearly "for state purposes" data updates to 303(d) list. Available on the internet
- until methodologies are all approved and states start to see less change, submissions to EPA should be every 2 years
- once steady-state for data is achieved, every 4 year submission is fine
- 5 years - corresponds to other EPA programs, however the rule should specifically require and provide for an effective procedure for delisting waters between cycles
- 5 years since 2 years is too intensive in light of future public review of state lists and associated water quality data
- if list of impaired waters is integrated with 305(b) list as an active list once TMDL implementation begins, do less frequent sampling than on 303(d) listed streams which do not have TMDL implemented or TMDLs not implemented
- states should be required to submit lists only every 5 years to allow sufficient data to be gathered, and to allow for more meaningful public participation
- there should also be an effective process for listing and delisting waters between submissions
- we would prefer 2 years but understand agency constraints. Due to the difficulty of working with nonpoint source waters, 4 years is acceptable. What about a 2 year cycle for point source impairments, and a 4 year for nonpoint source impairments?
- should be on schedule to match permitting cycle, i.e., 5 years - this would allow states ample time to appropriately assess water quality. Obviously permitting process should be on watershed basis irrespective of state boundaries

Individual Comments - Session Four - First Question

- 5 years to come into sync with permitted and rotating basins approach used by many states
- contingent on the importance of the stream or watershed to stakeholders, frequency of listing should be set by a state's activity to meet water quality standards. A 5 year term would fall near the maximum
- 5 years to coincide with permitting and to allow time for more data gathering and assessment
- allow some interim delistings and listings as needed
- the new rule should reinforce the idea of naturally occurring pollutants and removal of beneficial

use designation

- if should coincide with the 305(b). A 5 year base cycle with annual updates for the most recent basin. This way everyone is working with the most recent data possible
- 5 years as long as there are provisions to allow streams to be removed or added in the interim. This should be a simple and quick process (basically an annual update)
- 5 years, to match state's watershed cycle and to recognize work load associated with listing, particularly if we are going to increase public participation
- EPA will need to recognize that parts of some lists (for specific basins) may be based on older assessments
- should be required every 5 years to allow time for public participation, to allow time for monitoring cycles, to allow more data to be available for making determination and to keep the data current
- if the Clean Water Act is not amended, every 4 years to keep 305(b) / 303(d) linked
- if the Clean Water Act is amended to allow 305(b) on 5 year cycle, link to 303(d), match with rotating basin approach, and with NPDES permitting cycles
- should allow states to submit annual updates to 303(d) lists to reflect progress

How can EPA and the states improve public understanding of listing decisions and, therefore, increase the public's involvement in the TMDL program?

- public interest will be waterbody / basin specific
- need considerable focused effort to communicate, but in a "non-alarmist" way
- need to explain the entire management program, rather than focusing on the list
- stakeholder involvement in listing process and data collection
- need for coordinated monitoring between states to improve assessments
- more money, more staff at the state to conduct outreach efforts
- longer listing cycle allows more time for public to examine the data and the listing, particularly the non-303(d) categories
- next listing process is a concern because streams will be moved into different categories without adequate public review time
- public review period not long enough - if it takes the state experts 6 months to review the data but the public has only 30 days
- establish national volunteer water corps, college and high school students. State-run but on a federal basis. Institute a tax to fund, through water providers
- grant program, similar to CERCLA Technical Assistance Grant (TAG), to be instituted in the water quality program
- state TMDL staff should "train-the-trainer", meaning hold TMDL training for NRCS, farm board leaders, etc., and others with high stakeholder interaction. This way some of the "mysticism" surrounding TMDLs could be dissolved
- involve volunteers
- work with health officials on public health impacts of poor water
- public education needs to occur

- do education at the county level (maybe use county extension)
- need to build trust (county officials and local officials)
- involve locals
- do the listening / public education-type sessions at the local level
- have information tailored to the local level would be helpful
- use existing non-partisan education programs, not state, not advocacy - university exchange program
- need to target communities / watersheds at beginning of process - methodology devit / listing process, not just during TMDL devit
- credibility and consistency are important; public must understand why decisions were / are made
- states need to work with various stakeholder organizations and groups to increase awareness and understanding (education is key)
- public / stakeholder buy-in to the process (via their review of the assessment methodology) makes it easier for them to buy in to the product (i.e. final list / report)
- provide technical assistance funds to public groups to help understand and interpret data - could be set up similarly to the CERCLA TAG program. This would be quite effective in states where a rotating basin monitoring approach is used because each year a region of the state would be focused on and that region could be offered a grant to hire technical assistance for that year
- better internet access to data
- agencies make data more available via the web and have maps in with 303(d) list streams shown out in the 45 day public notice sent out to libraries or conservation districts, so those people without web access can participate also. Data easily available also. And not by WBID or HUC or other numerical codes, but by common stream name and / or area
- EPA provide links and information to help people find it in each state
- web-based tools
- EPA - internet access and disbursement
- a network of different organizations, i.e. ODEQ and farm bureau and Ag. Extension office
- data needs to be simplified so that the average person an find it and understand it
- data needs to be accessible to people that want the details for each waterbody
- EPA can link to state's data (on their web site)
- EPA / states need to hold public meetings and publish articles in large circulated papers
- public outreach should be involved during data collection and listing process - including 303(d) list drafts on the web, public meeting emails, and a listing of what data was used to determine listing
- "natural" conditions which cause water quality problems need special attention to develop site-specific or regional fixes
- volunteer programs are good for simpler analyses. Training programs recommended
- resources need to be available for education and training for new farming practices, forestry, etc.
- EPA outreach personnel should help get out the education on the regulations, how they work

and how they affect the public. It takes a lot of repetition. Stakeholder and general public needs to have plenty of real opportunities to participate and have input. Also, listing methodology may need to be changed to help with public participation. Yes, have lists and reports on the web! And in prominent places in libraries, etc. for those who don't have web access

- invite participation early - starting with methodologies
- use small meeting settings
- methodologies should remain static rather than changing with each listing cycle
- allow for Clean Water Act monies to pay for meetings (2 - 4) in the priority watersheds so that local stakeholders can be educated
- provide grants to local conservation district to hold a series of educational and update meetings. This would get the information to the local level and an unbiased group carrying the information
- public involvement in development of methodologies should be heavy on public involvement including monitoring design. Public should be notified early enough to be able to collect data for assessment and listing process. Public needs to be able to see the transparency in how data and which data was used to place water on any segment of the list
- multi-agency collection and review process to keep public involved in process of reviewing and monitoring throughout the decision making process
- beyond listing decisions
- all data must be made available to public
- public involvement would be much less of a surprise to the public if it had already been available
- look at model used in Alabama, where soil and water conservation districts did statewide monitoring and ADEM then used data to prioritize and target critical watersheds. This was done with 100K
- circuit rider(s) to educate / outreach regulated communities coordinate data sharing between states, insuring consistency between states and tribes
- encourage states to allow meaningful public participation in the development of both the listing methodologies and the 303(d) / 305(b) lists
- put out press release in a timely fashion that is in layman's terms. Also, hold informational meetings at night, so regular folk can attend. An excellent model is how Oklahoma Water Resources Board's Water Quality Standards Division conducts their annual WQs revisions - everyone likes the format - both industry and enviros, etc.
- require listing process to go through process similar to rule making, i.e., proposal with supporting documentation open for public comment, public meetings, etc.

Individual Comments - Session Four - Second Question

- web based display of 305(b) and 303(d) monitoring and assessment information
- facilitated dialogue with public and private bodies is imperative
- volunteer monitoring is good if training standards and QAQC standards are met
- help coordinate stakeholders in fund raising for scientific studies and federal matching funds - do a sales pitch at a workshop for city managers who have power to commit money
- MISCTNOCAWY (make it so complicated that no one can argue with you)

- CATFISH FRIES IN THE WATERSHED
- leverage Internet and web site access and tools expand as quickly as possible
- public participation in preparing of listing methodology make sense but will not be sufficient in itself
- also need public meetings at basin level on draft 303(d) for specific basin (in addition to public meetings for entire statewide list)
- need to also better educate public about overall program and stressing how individuals are also responsible for nonpoint source pollution
- preliminary list can also be used to increase public awareness
- stakeholder involvement in listing process and list review
- stakeholder's allowed to include data
- education to listing decisions and Clean Water Act programs in general. Who knows how the TMDL program interfaces other EPA programs?
- the public needs to be involved from the beginning, starting with the initial assessment of waters. Then they can be involved with priority added data collection efforts